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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,636	12/12/2003	Soo-Jin Park	P56916	1649

7590 08/22/2006  
Robert E. Bushnell  
Suite 300  
1522 K Street, N.W.  
Washington, DC 20005

EXAMINER
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DESAI, RITA J

ART UNIT	PAPER NUMBER
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1625

DATE MAILED: 08/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/733,636

Applicant(s)

PARK ET AL.

Examiner

Rita J. Desai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,7,9,10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 12-14 is/are rejected.
- 7) ☒ Claim(s) 7,9 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

Claims 1, 7,9-10, 12-14 are pending.

The request filed on 5/22/06 for a Continued Examination Application (RCE) under 37 CFR 1.114 based on parent Application No. 10/733,636 is acceptable and a RCE has been established. An action on the RCE follows.

**Claim Rejection 103:-**

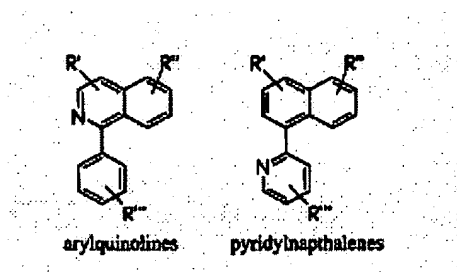
In paper mailed 1/2005 a rejection under 35 USC 103 was made over '656 publication.

The compounds disclosed are positional isomers. See figure 49 of the reference.

Applicants compounds are position isomers with the same groups. Quinoline and a phenyl.

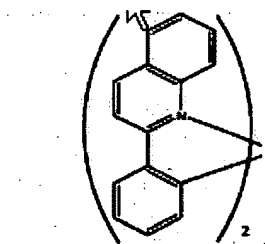
The prior art has a number of examples. They show an equivalency of many different ligands.

These are also used as luminescent organic compounds. Please see all the compounds. With the wide variety of equivalency shown and groups such as



included in them, it would be prima-facie obvious for one of

skill in the art to use ligands of the formula which are as follows



<sup>2</sup>. It can be clearly seen by the structures the close similarity.

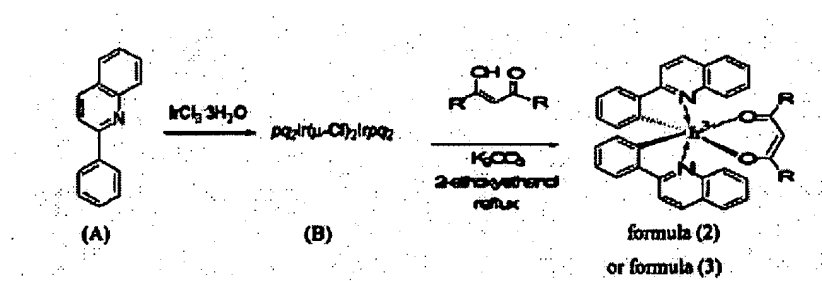
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In all the figures the various groups linked to the Ir are also shown.

Applicants argue first that *isomerism* by itself is not a prima facie case of obviousness.

That may be true however the reference is also drawn to organic light emitting devices. The reference also states that “improve” electroluminescent efficiency in organic light emitting devices is obtained with an emitter layer comprising organometallic complexes of transition metals of formula  $L_2M X$  where L and X are distinct bidentate ligands.

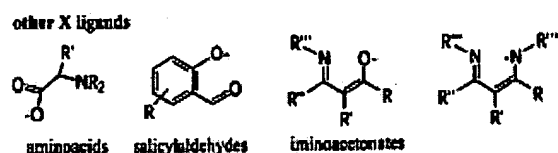
Applicants instant application is also drawn to the same. See below.



Applicants have amended the claims to delete the X to give compound which would be isomers of 2 or 3.

Applicants also argue that examiner has failed to establish a prima facie case because ‘656 publication because the publication does not teach or suggest the X ligands as recited in claims 1, 7, 9, 10, 12-14. This is correct because applicants have amended claim 1 to delete 2 of the ligands. The X ligands given in figure 49, “iminoacetones” does not read on the X ligands

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of the instant application. “ .These

iminoacetates have double bonds and applicants X ligands do not .

Hence the rejection has been withdrawn.

Claims rejection under 35 USC 112

The previous rejection of claims 1, 12-14 under 35 USC 112 still stands.

It can be seen by the above rejection being dropped that the double bond in the iminoacetates present in the prior art is not prima facie obvious to the X ligands of the applicants, that the various R1-R10 substitutions would also have to be enabled since slight differences such as a bond is patentably distinct.

Applicants argument that the prior art does show substitution is incorrect. The compounds only have H as the substitutions on the L ligand.

Thus the rejection under 35 USC 112 still stands.

### ***Conclusion***

Claims 1, 12-14 are rejected.

Claims 7, 9 and 10 are objected to as being dependent on a rejected claim.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita J. Desai whose telephone number is 571-272-0684. The examiner can normally be reached on Monday - Friday, flex time..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas McKenzie can be reached on 571-272-0670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rita J. Desai  
Primary Examiner  
Art Unit 1625

R.D.  
August 15, 2006

*RJ Desai*  
*8/15/06*